

We claim:

1. A method for link quality control in a wireless communications network comprising:
determining whether an indicator of link imbalance exists among a plurality of base stations associated with a mobile unit, and
implementing a control action to help prevent at least one of fading or signal cutoff between the mobile unit and at least one of the base stations, if the indicator indicates that link imbalance exists.
2. The method of claim 1, wherein the determining step includes receiving base station forward link information and base station reverse link information of the associated base stations regarding the mobile unit.
3. The method of claim 1, wherein the determining step further includes determining that an indicator of link imbalance exists when a number of reverse power control down bits over an amount of frames at any one sector is one of greater than and equal to a threshold value, the any one sector being from one of the associated base stations.
4. The method of claim 1, wherein the determining step further includes determining that an indicator of link imbalance exists when an energy to noise ratio for a number of frames minus a global set-point is greater than a threshold value at a sector of the associated base stations, the global set-point being an acceptable energy to noise ratio for the mobile unit.
5. The method of claim 1, wherein the determining step further includes determining that an indicator of link imbalance exists when a sector has a local set-point minus a global set-point that is one of

greater than and equal to a threshold value, a local set-point being determined locally by one of the associated base stations based on a signal to noise ratio, a global set-point being an acceptable energy to noise ratio for the mobile unit, the sector being from at least one of the associated base stations with a strongest forward link.

6. The method of claim 1, wherein the determining step further includes determining that an indicator of link imbalance exists when a sector with a strongest forward link has a short-term local reverse link error rate that is greater than a threshold value, the sector being from at least one of the associated base stations.

7. The method of claim 1, wherein the control action includes instructing each associated base station to raise a minimum gain on forward links associated with the mobile unit to a specified level.

8. The method of claim 1, wherein the control action includes instructing at least one of the associated base stations to raise the minimum gain of forward links associated with the mobile unit by a specified interval.

9. The method of claim 1, wherein the control action includes instructing the associated base stations with strong forward links to send reverse power control bits based on the strongest reverse link.

10. The method of claim 1, wherein the control action includes instructing each base station to raise a minimum gain on all strong forward links of the associated base stations to a specified level and setting weak forward links of the associated base stations to a low gain value.

11. The method of claim 1, wherein the control action includes instructing the all the base-stations to adjust a minimum gain set point of the reverse link by a set value from a nominal value.

12. The method of claim 1, wherein the control action includes instructing the associated base stations to raise a minimum gain of all strong forward links by a specified interval and setting weak forward links to a low gain value.

13. The method of claim 1, wherein the control action includes instructing all the base stations to adjust a minimum gain set point of reverse links, associated with the base stations by a set value from a nominal value.

14. The method of claim 1, further comprising determining when to discontinue the control action.

15. The method of claim 15, wherein the determining when to discontinue the control action includes discontinuing the control action when a handoff state changes.

16. The method of claim 16, wherein the determining when to discontinue the control action includes maintaining the control action for a fixed time period.